SIXPENCE

**APRIL 1945** 

# AMATEUR IO

THE
OFFICIAL ORGAN
OF THE
WIRELESS INSTITUTE
OF
AUSTRALIA



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# AMATEUR-RADIO

INCORPORATING THE N.S.W. DIVISIONAL BUILLETIN

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# - TROPICALIZATION -

The preparation of radio and electronic equipment for tropical service is of fundamental importance today. Tropicalization, which is a specialised problem, may be defined as the design and protection of equipment for use in tropical areas. This equipment must frequently be operated intermittently in low, wet, damp lands where there is little direct sunshine and no cover, and where repair facilities or maintenance parts are not available. During the periods when the equipment is not soperated there is considerable absorption of moisture and condensation takes place on non-absorbent surfaces.

High hunddity causes three destructive forces to go to work on electronic equipment; rot and swelling, corrosion and fungus. The problem of combating these resolves itself into several associated problems.

1. Selection of components which do not readily absorb water. 2. Components which give minimum corrosion trouble.

 Components not readily attacked by fungus.
 Protective coatings of those parts subject to damage by moisture, corrosion or fungus,

5. Proper design which takes cognizance of the above problems.

In connection with the selection of components which do not readily absorb moisture, the following conclusions have been reached. Phenolic insulation should be moided where-ever possible. If this is not practical, a non-organic base laminate is preferred to cotton or linen. Water absorption can be reduced by thorough varnish impregnation before or after terminals are placed in a terminal board. Special care should be taken to see that fibre ends are sealed against moisture penetration. This helps to eliminate swelling, lowering resistance and growth of fungus.

Fibre, cotton, linen and wood have proved troublesome and in order to protect them against moisture, each strand must be saturated with a moisture-resisting fungus inhibiting impregnate after the material has been thoroughly dried. Ceramics are porous in an unglazed state, best treatment is to use a glazed finish.

SELECTING COMPONENTS ... The selection of components to resist the inclusion of moisture is a more difficult matter, but in general, it is concluded that all components should be insulated and coated with a mineral wax, preferably bearing a fungus-inhibiting material. Assistors of the power wire-would type should be believed to be of maximum resistance to high humidity and salt water immersion consistant with the space allowed; the use of small diameter wires and exposed windings should be avoided.

CAPACITORS...Capacitors of the fixed mica type, molded in phenolic should be coated with a fungicide and high melting point mineral wax. Oil filled capacitors should be harmetically scaled; paper wrappers are virtually uscloss under high humidity conditions.

Transformers and chokes should be negretically useled. AF coils should be thoroughly impregnated and would on forms which are suitably moisture resistant, such as molded phenolic or glazed ceramic.

Wire should be selected to have a high initial insulation resistance, so that under prolonged humidity exposure the insulation resistance will still expeed ten megohms.

It is difficult to form and conclusions as a result of the above discussions. Water absorption of materials and components can be stopped if care in sciention is applied. The bost rule would be, when in doubt, eliminate the material or component, if an acceptable alternate is available.

MINIMIZING CORROSION. The rules for minimizing corrosion are better ordexitions than any of the other rules in this discussion. Corrosion has been defined as an electrochemical destructive reaction between two dissimilar materials. Since two unlike surfaces and a conducting medium are recessary for most certaion, penhaps the simplest method of preventing corrected with what is known as a layer of protective selts which may sometimes be obtained in the manufacturing operation. In practice it is common to treat aluminium with anodic processes to give a protective salt on the surface, the formation of a chromate, sulphate or like salt on the surface.

An offective treatment of unlike surfaces would be as follows:propor cleaning of the surface, priming and then painting, elimination of matallic insorts in an unlike metal. Study of types of
atmosphorus to be encountered and expected correction products.

The selection of materials and components, not readily attacked by fungus, is a little more difficult to define than any other problems already presented. Cortain things we know, and those are fow:-fungus grows in a moist atmosphere, fungus attacks certain motals to form organic salts; fungus grows in confined atmospheres; fungus will attack rough surfaces.

FUNGUS GROWTH...Elimination of components which tend to absorb water can now be seen to be important as a means of proventing fungus. Bere motal surfaces are not only subject to corresion

but also attack by fungus. .

Confined etwospheres are the most difficult problems to solve. Confined tight-weight equipment makes moss says the very thing which contribute to the analyzents Tellure: confined atmosphere which are good climping place for fungus. Points of concentration of fungus ang lacing of wire, switch contacts, motors etc.

These points of growth can be best eliminated by proper design. Section of material and components and the proper protective coatings can sic help. Those coatings, basically, involve use of fungus unhibitors such as phenyl mercurial or chorinated phenol in certifors such as phenyl mercurial or chorinated phenol in certifors such as phenolic variety variety or the like. The actual certing may either be sprayed or brushed onto the component. If sprayed, masking of certain components which must have a bright surface while of ceurse be necessary during the spraying operation.

CIRCUIT DESIGN. Cratical, high-gain circuits perform well in a Thorestory sottap but do not perform satisfactorily in the vield. The use of high resistance grid leaks in high gain ampulations is one of the best examples of this. For instance under high countaity conditions a five megohm resistor will behave more lake a three megohm resistor. Again, high Q coils in RF circuits will acce a high Q only as long as no conducting film shunts the coil. Then the g will deep considerably.

"This type of reasoning would outlew some of our highly developed circuits of today, if it were carried to its utmost. But the less cristful the circuit, the fewer the parts, the more careful choice in the soluction of parts and material—the longer the equipment will latt.

### ONE TUBE FREQUENCY DIVIDER



In most multivibrator circuits used for frequency division, at least two tubes are employed in the multivibrator and an additional tube is required to isolate the multivibrator from the cutput circuit load. In an article in a recent issue of "Wirelsses World" a circuit to do the above job and using only one tube is described.

As shown in the accompanying circuit a hexode oscillator circuit is used with the sych-renizing voltage, fed to the No. 4 grid. The degree of this voltage is regulated by the

potentiameter R4 while the coupling condensor is so chosen that its capacity is approximately one tenth that of C3. The escillation frequency of the uncontrolled multivibrator is determined by the time constant of the resistance and capacity in the oscillating circuit. By using a hoxede, it is possible to utilize the delectron-coupled plate circuit for external coupling purposes. Thus R1 serves as the plate load and C1 as the output boughing capacity.

### FEDERAL HEADQUARTERS

### -- A Review of Activities in N.S.W. 1941-1944 --

Early in 1941 the question of the location of Federal Headquarters was discussed at longth at Now South Walos Divisional Council Moetings. At this particular time Victoria was acting as Headquartors Division in addition to publishing the Magazino, It was folt that the Institute as a whole was asking a great deal of the Victorian Division to act as Federal Headquarters and to publish the magazine as well. It is to be stressed at this juncture that no request for relief had been received from Wis.

It was doubled to approach Victoria and offer to relieve their burden by taking over Foderal Headquarters. VKS gratefully accepted this offer and the first meeting of the new Executive which consisted of Mossrs, Josephyne, MoElrea, Peterson, Priddle and Ryan, with R. Priddle as Cheirman, W. Ryan as Socretary, was held on 27th October'41.

One of the first decisions made was to make a survey of the workings of the various Divisions. This was found to be very disappointing. N.S.W. and Victoria were found to be the only really active Divisions, Western Australia maintained an active organisation which mot occasionally whilst in the other States, the Institute was non-existorit. As far as Queensland was concerned it had cloted a comparatively new executive just prior to the war - the new Secretary just having received his licence, so every little blame could be laid at anyone's foot. It is fully realised that this state of affairs agrees mainly due to Service inreads on personnel, but nevertheless there must have been some members available who could have maintained some form of skeleton organisation.

The next stop taken was the compilation of a Service Register. Forry ham listed in the F.M.G.'s list of Experimenters was circularised. In all 2018 circulars were sent out and approximately 50% were returned. This Consus gave a wealth of information and upon tabulation, was published in the magazine. Quite a deal of good came from it in other ways. Amatours realised that the Institute was still functioning and active Divisions benefited by an influx of new members, in addition, F. Allen VEYFA effored to represent the Institute in Tammania and likewise E. A. Barbier 5MD in South Australia. (TAP has continued to act in that capacity right up to the present, but unfortunately 5MD's interest was shortlived. The total cost of the Consus amounted to £15/11/9 or 1.856 per Experimentor.

The Executive was concerned with the position of these Ameteurs in Status where the Institute was inactive and various proposals were made and discussed as to the manner in which these Experimenters could be catered for. Soveral times the possibility of an all Australian organisation was discussed.

In other words, instead soven Divisions - only ene. The main inducement at that stage to be a really worthwhile "Amateur Radio" to be the means of holding the Mombors interest,

Eventually the suggestion of one body was pigeomholed due to the lack of time necessary to organise, but it was decided that stops be taken to have the magazine made worthy of the eldest Experimental organisation in the world.

At this time New South Walos was publishing "The Monthly Bullotin," ofreulating among its own members. Both Victoria and New South Walos were approached with a view to an amalgametion. Eventually a satisfactory basis was reached and a worthwhile magazine - although not in printed form appeared.

Bofore leaving the Magazine, the rotiring Federal Executive would like to congratulate the Magazine Committee, particularly Mossrs, Hogan, Marsland and Anderson upon the splondid job that they have done often under difficulties - perhaps mere often than not. It is particularly gratifying that sufficient advortising is now forthcoming to make cortain that no loss is being incurred. In addition, the magazine goes to all Members of the Division, which as far as VK2 was concerned, meant quite a boost in circulation. Now South Wales must not be forgetten for their part by making a monotary contribution to help offset the increased cost of tho onlarged magazine as well as supplying notes and technical matter. A word of warning, "Ameteur Radio" is the "Official Organ of the Wireless Institute of Ametralka," not of any one State. Recently some members of the Federal Executive had the pleasure of meeting Mr. "Bob" Anderson. Secretary of the VK3 Division and a Mombor of the Magazine Committee. Naturally the magazine was discussed and 3WY advanced the view that "the people who did the work on the magazine should decide what should be published, This is wrong. As the magazine represents the Australian Amateur. doop consideration should be given to the matter published. In the post war years the magazine will play a very important part and it must not be permitted to develop any outlook other than an AUSTRALIAN one.

J. Corbin 270 also is to be congratulated for his offorts in making the "Khaki and Eluo" subsequently changed to "Slouch Hats and Forago Caps," pages, the most popular and eagorly read section of the magazine. Strange to relate, the compilation of those pages has not always been easy. For some strange reason quite a number of Sorvice Amatours adopted a form of roticonce quite. foreign to the lik, If some of the tributes paid to these pages well, quite a lot more than the world more than likely VKS as well, quite a lot more chaps would have dropped a line to 78 Malong Street, Estilates, Thure is still time yet!

A Prisonors of War Fund was arganised by the Executive and no less than £22/19/- was collocted. Unfortunately the majority of Australian P.O.W's are in Japanese hands, and it has been impossible to forward conforts to them. Several donations were made to A.R.C. Frisonors of War Fund whilst parcels and books have been dospatched to Messrs. Campbell and Edwards. The balance of the account amounting £27/18/- is still on hand, and it is to be hoped that arrangements can be made in the very near future for its distribution.

During the latter part of 1942 a direction was issued by Scenity Sorvice per medium of the Wireless Branch, stating that Sonied Containers in the personstened of Experimenters were to be hunded over to local authorities for safe keeping. This order created a furer in the Amateur ranks as very few containers had been packed sufficiently well for their removal. Application was made to the Chief Radio Inspector for an extension of time for ledgment and this was granted.

The China Amatour Radio League asked the co-operation of Federal Headquarters in obtaining a collection of Amstralian 201's for their Convention, to be held in Chungking. A collection of cards representative of all Amstralia States including New Guinea and Papua was made and safely reached its destination. The fact that Chinose Amatours could held a Convention in that war term land speaks highly of their courage and tenacity of purpose. Congratulations XI;

During Octobor 1945 Now South Whole had acted as Hondquartors Division for the statutory ported of two years. Upon referring the question of location to the States or their representatives, all were unanimous that New South Wales continue to set. Following upon this advice, it was decided that an election of Officers be held. Mossrs. Friddle and Gough both intimated that they were unavailable. Mr. Joseelyne's resignation upon joining the Army. It was decided to place on record the retiring Executive's appreciation of the work performed by Mossrs. Gough and Friddle. The new Executive consisted of Mr. F. F. Dickson Walff Chairm, H.F. Poterson, WASHP VICE Prosident, W. G. Ryan VKETI secretary, and Mossrs. Fryar VKENF and McElron VKEUV Councillors.

In an ondeavor to essecriain the views of Experimentors regarding the Post War ore and Essay Composition spensored by the New South Wales Division was held by Federal Headquarters. The results were disappointing both from the point of view of the number of entries received, the quality and the very few original ideas expressed. In publicising the competition, quite a number of sub-headings were suggested. Most competitors wrote around those. Whilst this was flattering to the Executive, it was disappointing that vary little originality was expressed! One.

important point where quite a deal of controversy could be expected. Was the question of power. Every entrant agreed that 100 water would be sufficient.

Porhaps the max t important advance made by Experimental Radio in Australia took place in 1942 when efficial approval was granted for the use of Amatours and their equipment as an arm of Civil Defence, Networks came into expertion in New South Wales, Western Australia, South Australia and Tammania, Of those Nots the largest and most important was in New South Wales and was the only one called into action during an Emergency, Unfortunately VK 5, 6 and 7 Nots have now closed down whilst New South Wales is functioning on a reduced scale. However, out of these war time Nots have sprung organisations that will expand largely in the post war years, viz. the Bushfires Radio Networks in Victoria and New South Wales.

Unfortunately Victoria was unable to obtain permission to inaugurate a Not for A.R.P. purposes, but in recent months some headway has been made with the Powestry Commission and it is understood that stations will be in operation very soon. Victoria are to be congratulated upon efforts and their refusal to acknowledge defeat.

In Now South Walos, Bushfiros Emergoncy Radio is in operation and during the winter ments the organisation will be expanded to meet demands of the forthcoming summer. A great difficulty to be everyone is lack of personnel in areas where they are needed.

During pro-war yours many placs were made for the use of the Amateur and his equipment during Flood and Bushfire Emergencies; Out of the A.R.P. Nots during the war this opportunity area. Let us make cortain that it is not permitted to slip away during the post war roars,

The foregoing m gos doal briefly with the 'activities of the Federal Executive during the past three years whech have been the darkest in the history of civilisation. Despite this fact, every Member of the Institute will agree that the Executive has not been inactive and has kept the flag flying in an endeaver to make cortain that alive organisation will be ready when the day comes for the lifting of the ban on Experimental transmissions in Australia. That day is very, very, rapidly appreaching. The location of Federal Headquarters has been the subject of discussion at several recent Executive moetings. It was finally decided that the interests of Experimental Radio could best be served by having Federal Headquarters located in that State wherein the Director of Fests and Telegraphs had his office. The New South Wales Division endorsed those views and Victoria was asked to act as Headquarters

Division, VES have agreed and their term of office commoned on the first of March 1945,

What of the future? It is the pergative of a retiring body to make recommendations to the newcomers. During the past year the post of a retiring to past year the post of the return of the return the post of the return th

Again, with a permanent secretary or staff, the work of compiling and publishing the magazine would not be as difficult as it is to-day. The majority of the entrants in the Essay Compution where of the opinion that at least a permanent Secretary was an essential for the post war Institute. The A.R.R.L. and R.S.G.B. have a permanent staff, The H.Z.A.R.T. had decided on this stop just prior to the outbreak of war. Must Australia lag behind:

Another wartime innovation of the retiring Executive was the publication of Notes in the magazine and prior to that, each Division received a copy of Executive Council Meeting Minutes. This practice should be continued. Do not let Fedgral Hoad-quarters become a closed book to the majority of Institute Members. Teatics of that nature brought about the unfortunate happenings when Federal Headquarters was last located in New South Wales in 1937-38.

In conclusion the Fodoral Executive would like to thank all Divisions or representatives, particularly Va6 - who, nearly two thousand miles away set a splendid example-es 7 PA Fotor Allan, for their splandid co-operation during the difficult years. To the incoming Executive, hearty congratulations and the hope that they will see Experimental Radio again active very seen in Australia.

On behalf of the Retiring Federal Executive,

W. G. RYAN, VK2TI, Rotiring Socrotary.

...000 ...

### THE TECHNICAL LIBRARY

MATTEMATICS ESSENTIAL TO SIECTRICITY AND RADIO....Lt. Noison M. Cooko and Dr. Joseph B. Orleans (Now York) 1945...418 pages ... 24/-

The radio training programmes of the armed forces in the United States which Fram Harbour have apparently necessitated the production of rocks converning the toolmisal and mathematical basks of radio communication, if one is to judge by the number of such books which have appeared during the past three years.

The book under review this menth is representative of the better class works deniing with the methoratical angle and is intended for the student who has only a rudimentary knowledge of methomatics. The entire field is covered with reasonable adequacy from addition to quadratic equations. The former, one hopes, is included mainly for the sake of completeness!

Chapter headings are as follows:- Introduction, Literal Numbers, Addition and Suctraction, Muttiplication, Division, Equations, Powers of Ton, Significant Figures, Units, Chms Law, Sories Circuits, Revistance, Wire Series, Special Freducts and Factoring, Fractions Squations containing Fractions, Ones Law-Parrelled Circuits, Grappes, Sets of Linear Equations, Concrater, Motor and Eathern Circuits, Exponents and Radicals, Quadratic Equations, Kircheff's Laws, Logarithma, Applications of Logs, to Doctools and Transmission Lines, Angles, Trig, Functions, Tables of Functions, Solution of Right Triangles, Portedic Functions, Elementary Finds Voctors, Albertaing Currents, Fundamental Idoas, AC Series Circuits A.

An Appondix rounds off the subject matter with tables of Mathematical Symbols, Grook Alphabet, Copper Wire Tables and Trig and Log Tables.

It is really surprising that so much has been fitted into just over 400 pages, yet there appears to be no evidence of skimping at any stage, and everything is well set out, with clear and adequate diagrams where necessary.

I would like to say that Lt. Cooke and Dr. Orleans have, between them, done a good job.

This book and all books reviewed in this page are supplied by courtesy of McGills Newsagency, Elizabeth Street, Melbourne.

Aloc. H. Clyno - Roview Editor.

### SLOUCH HATS & FORAGE CAPS

In warting you will cite a see that the news of today is out of 6cts, an eiter numeral itemston. For minum is no exception, I not reade, for inserter, it will need to the cite at Powe Pin, but me and go as anythe as an end of the site at mountains by good formit, to by left, abscure a site of it but into the lock on myphantered in VA, and as on, we way so a new it in the lock of the control of

The CO of the School Frank attended was Bob Chilton 28C, while the class had its usual ham quota:  $.80/\mathrm{Adr}$  3CU,  $F/\mathrm{Lt}$  AFW &  $F/\mathrm{C}$  4EA Another Ham, Roy Streey, 2HY, now a  $F/\mathrm{Lt}$ , was attending another school in the same area. Roy has been in the R.A.A.F. since the beginning, but news of him has been very scarce.

Fred Lubach 4RF is still around Townsville, and apart from a little work for the Navy, he is designing an II tube super, and wondering how 8138 go on 50 Watts. Apart from that he keeps an era out for news for Amateur Radio. Bill Asplot visited him recently in between shifts at Townsville G.P.O.

CMSof Telegraphist Kerkin VK2CT is now holding a very responsible position on H.M.A.S. Hobart.

Low Mores EES who seems to have been just about everywhere since the began, is now in a Eaval Beach Unit and expects to meet a few of the "Embarable" Js in person soom...they tell me, Lee, the Yanks just about blast everything off the face of the earth near the landing...so her's hoping...200.

Sgt. Ackling. Australian Special Tireless Group. Australia. wouldn't itli, far be'ter known as VEST has at las met some "Foreign DX. in the shape of two VEs. ATY and dTO. There two, say there are more hams with thom, and that one of these has often were also be a superficient one of the American Radiu, so they could get in touch with the Division in any Capital city they right happen to be in. Junat a man. A TIA man. I moun. if only all VK Hams in such circumstances would de likewise.

Some of you know Walter Hernes, IF the war had waited two more morning he would have a call but, alas, he only holds ACCP no. 2404, H1: He is F/O Radio Mechanic H.M.A. Radio School at Witzon's Bay. As usual he has a Ham to keep him company., YEEF. Wal his been in the Fivr for sixteen years now, He was on the Cumborra from the time War was declared till she was sunk in the Solomons, During the three yours he was on the "Camberra" thoy acted as essort to the AIF gyling to the Middle East, sorwed in the South Atlantic, Indian Ocean, Bay of Bengal, Red Soa and Arabian Sea. She was in

# Transformer Problems ARE AS SIMPLE AS...

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Singapore and the Datch East Indies when things were pretty desporate ... so no worder Wel has now gone more or less into retirement. But I believe he wants to go to see again. Hi,

Con Bischoff 2LZ has returned to Townsville, and the study of telescopes. He tells me that Sq/Lar Frid CBS, SBE is yet worther Ham to join the outfit. Applacing Allan Frath, who has returned to TIM. Sgt. Kahn 49A has also returned to their unit, while Mora Hart 4NO has been posted to Bristone. What they want mostly up there is a VRT to give them all States, Hii

Lt. Norm Hannaford is now with 1st aust. Beach V/Shops A.E.M.E. A.I.F. and in Feb was feeding protty sorry to find hisself still in VK. Ho was in the middle of leave in Melbourne when he was ingreely recalled. As he says. he shot through Vis 2 YIB, they ware if go at once... and here they are still. and all that leave int. he he says that when we hear that the 7th Div., has been in action he will be in it too, as they go in with the first lot...but as he poke it. "soumbody has to go in first"...best of luck, Norm, om, in any cure...2VC.

Another Ham who made my nows feel a bit out of date was 2VY. He popped in the other day on his war out to Associ acredrate to arrange a plane back. Morrie's Dad is unfortunately very 111 and he had just made a rush trie down from the Philippines.... I think

he said it was under three days trip down here...two days leave at home and then straight back again. He looks very well and is the same old Nowle you all knew in prewar days in soite of the fact he has now reached the addr heights of a wine Commander.

The latest authentic information about Sgt M.R. (Snow) Campbell, WISSER, coress from Evuce Mann VISSER, cores from Evuce Mann VISSER, core are received by him, It is dated 1/10/44 and reads "This is my third letter to you since being n my confined tour! I very often think of Camabatock and the interesting time I spent with you, and I can't help but wish to hear how you all are keeping and what you are doing etc. (Bruce says apracently Snow hasn't received letters from him.) I have met cuite a los of chaps from the Swan Hill area and they how a lot of folks that we know. I am keeping very well and passing the time now practions our wet hobby! Cheers, good health to all.

Sgt. Keith Scott VK3SS now finds himself well up in the islands and sends us news of himself. He contacted a Lt. E.D. Worsham ext. 200X of Detroit Michigan who welcomed Keith as a Ham and took him out co their base G receiver site; which gave him an insight into their communications long range system. They are working teleprinter links only over their main links; WT even high speed they consider obsolete by many years. The receivers are double diversity in racks and cab-inets, there being two or three pairs in each rack. They work on fixed frequencies, RF Osc and BFO are Xtal controlled. Tuning is possible over a limited range only by adjusting iron dust slugs in coils and IF's. When they move to another frequency they simply switch to another receiver. The teleprinter operates on a two tone system using FM sort of modified. Most elaborate and separate AVC channels maintain a constant signal strength of minus 6db. Filter circuits reject any frequencies other than the two selected tones, one used for mark and the other for space. They use lots of single wire rhombics on portable light steel lattice masts. Voltage regulator tubes are used extensively and they claim the receivors will maintain on correct pre-set frequencies for up to six months. That's the bare facts, says Keith "and she's a good show,

Expecting a perfect deluge of mail and telephone calls...ves the number is in the book...MULOS2...and the CRA Jim Corbin, 78 MaloneySt. Bastakos...Mascot..I thank you all...Hi

### FEDERAL HEADQUARTERS

Most readers will be aware by this time that Federal Headquarters has at the request of the New South Wales Division, been taken over by the Victorian Division. Officers elected by the Victorian Division. Officers elected by the Victorian Divisional Council being: President Mr. R. Marriott VESSI, Treasurer Mr. D. Hegan VESNE, Secretary Mr. A. H. Clyne VESVE, Councillors Messre. A. R. Williams VESWE and C. C. Cuin VESSE.

At thoir first mooting much time was spont in becoming familiar with thoir duties of office and studying the records forwarded by the outgoing Executive. A full report has been promised for next issue.

### NEW SOUTH WALES DIVISION

At the March General Meeting of the Division, Members were informed that Council were at present discussing plans for a Post War Institute. Among many matters discussed was the question of Premiumat rooms and the advisability of changing the Meeting night from third Intradey. At the present time the W.I.a. Meeting clacked with that of the I.R.R. and as many Amsteurs belong to both obganisations, it is fell that different nights may mean larger attendance. It is realised, of course that the Institute has reason meeting on the third Thursday for a decade or more, and Members will be asked to express an opinion before any change is made.

Members were informed that Major Don Knock was "again" a civilian and that Council had immediately availed itself of his Services by electing him to the position of Assistant Secretary. Don, who in pre-war days was Cheirman of the U.H.F. Section is just as keen an amateur as ever, and he should be a tower of strength to the Institute in the days to come.

Federal Headquarters has now been transforred to Victoria after a periof of three years in New South Wales. Every good wish is extended to Wictoria and every offer of co-operation made.

Members will regret to learn that Ivon Ballue VK2TM underwent a serious operation recently and is at present an immate of War Memorial Hospital, Waverley. Bob Fussell VK2SS is also having a bad spin. Members everywhere will join in wishing those old "Zoro-Bacters" a speedy recovery.

### BUSHFIRES NETWORK

Dubbo and Young are still carrying out Tests with their portables and a definite Practice Might has now been fixed. The Stations may be on any night in the week, but in order that other City and Country Amateurs may tune in to the transmissions, Friday night has been laid down as a definite Practice. Fractices will commonce at 8 p.m. and the frequency is 3115 ker.

### \*\*\*\*

### EMERGENCY COMMUNICATION NETWORK.

It has been decided that E.E.S. will continue after the war and be known as the A.R.D.A. Air Raid Defence Arm. Radio is to play a much more important part. It is hoped that further details will be available mext month.

In the meantime Network Stations will continue to practice on the first Friday of each month.

### VICTORIAN DIVISION

It will be noticed that DK put in an appearance at the March meeting in the porson of Ceptain Cadell VUZES, who during the course of the evening gave a humorous talk on Ham Radio as used in pro-war days in India.

A suggestion put forward at that meeting by one of the members into orbid in a gialing slib was that it was intended by the Club to install ground to flight transmissions and they would welcome members of the freitwee-fewning a restor to operate the gear. Those interested should contact the Institute Secretary who will pass on their names.

Unfortunately the movie show skeduled for the April mosting did not contained. Herey Kinnear BML apologies sincerely for this unfortunate happening, but through direcumstances entirely outside his contact has equipment became the dup and he was unable to make other error spears. However, as soon as he regains control of his equipment no will put on the show. It is doubtful just when this will take place, It maybe at the May Meeting and again it may not become the due of Meeting.

As a result of the show being off, the meeting tuned itself into a discussion of Frequency McGulation; and what is more important a free discussion of post war aims, and quite a few very good ideas were put forward.

Once again the Laberatow, Committee have passed a report to the Edibor Which reads - "These notes are claiming the attention of more and more readers...we have definite proof that three members now take the creatile to read beyone the besting. A few months ago our request for back issues of GST was noticed by SCH, and now SCH and ST N have responded to the appeal for back issues of magazines published last month.

The preparation of plans for the re-habilitation of the library has soon occupying our attention for some time, and those will be put into effect just as soon as the necessary finance can be secured by the sale of the motor generator sat.

HAMAD...Bruco Mann VK3BM. "Morningquest" Quambatook, Victoria will pay any reasonable price for:- Radio May 140; All issues 1942, Radiotronics No. 97;107; 109; 115 and all later issues. Philips TC No. 64,73,88 and all later issues.

### THE WIRELESS INSTITUTE OF AUSTRALIA



Divisions of the Wireless Institute of Australia exist in every State of the Commonwealth. The activities of these Divisions are co-ordinated by Federal Headquarters Division, the location of which is determined from time to time by ballot.

### Present location of F.H.O. :- New South Wales Federal President: F. P. DICKSON, VK2AFB.

Vice-President: H. F. PETERSON, VK2HP. Federal Secretary: W. G. RYAN, VK2TI.

Councillors: C. FRYAR, VK2NP: W. J. McELREA, VK2UV

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